

FIG. 1

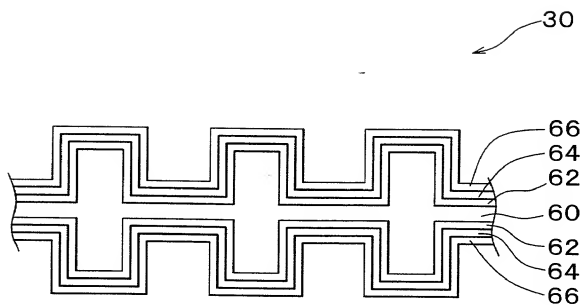


FIG. 2

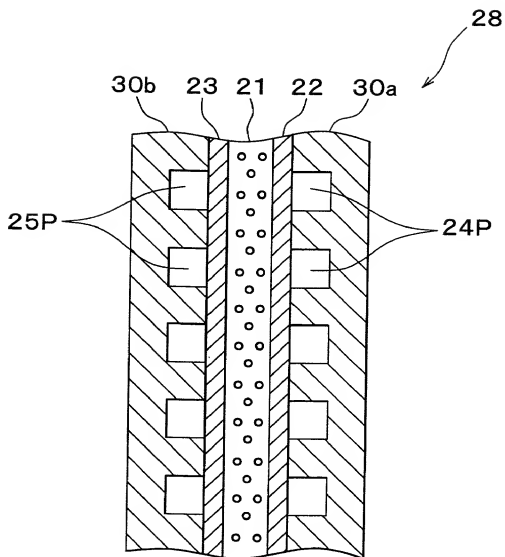


FIG. 3

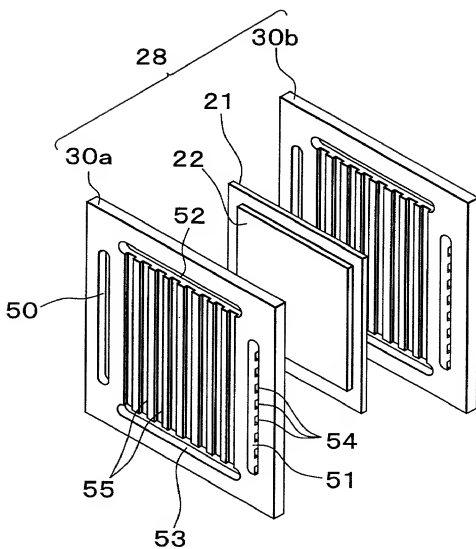


FIG. 4

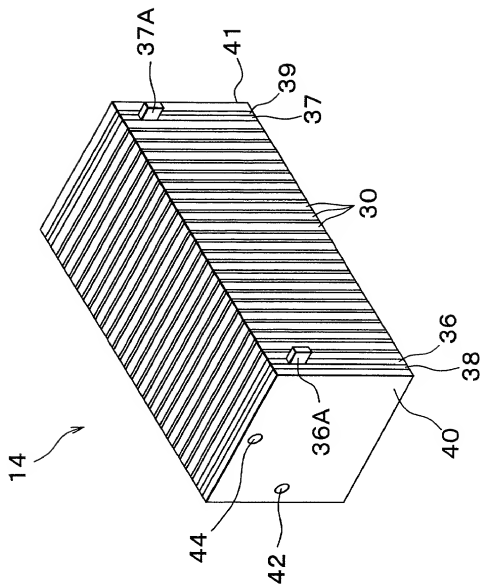


FIG. 5

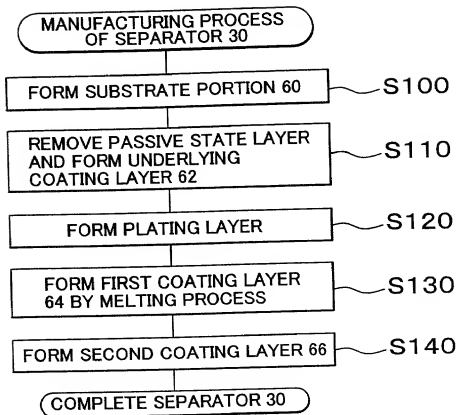


FIG. 6

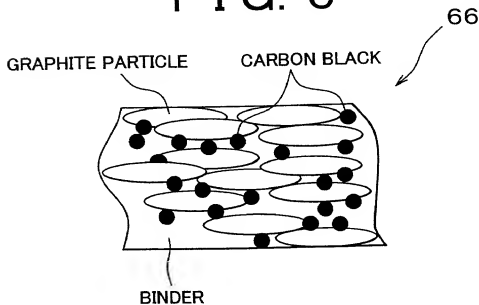


FIG. 7A

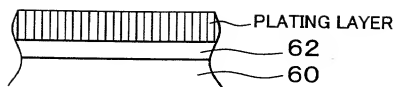


FIG. 7B

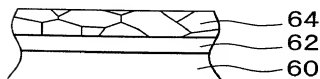


FIG. 7C

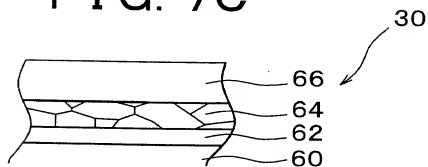
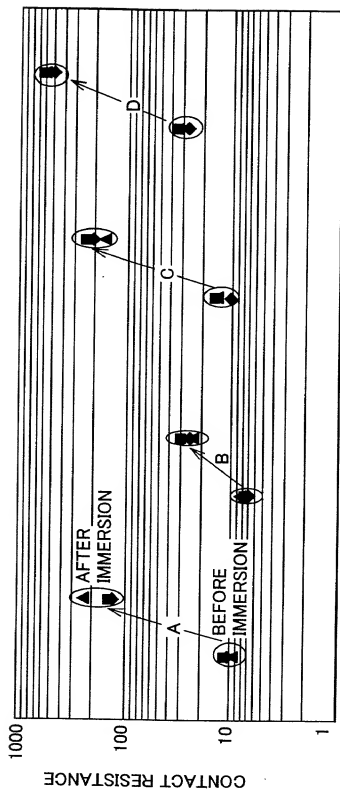


FIG. 8



- A : Sn-Bi, WITHOUT MELTING PROCESS
 B : Sn-Bi, WITH MELTING PROCESS (AIR-COOLING)
 C : Sn-Bi, WITH MELTING PROCESS (WATER-COOLING)
 D : Sn, WITH MELTING PROCESS (AIR-COOLING)

FIG. 9

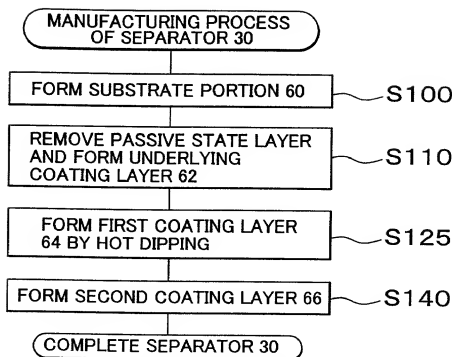


FIG. 10

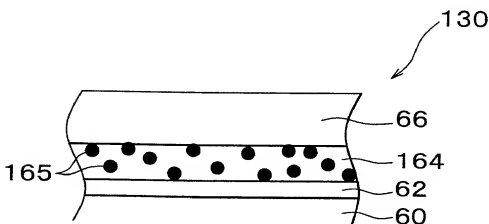


FIG. 11

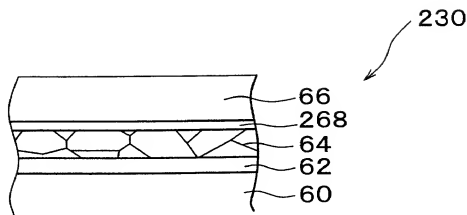


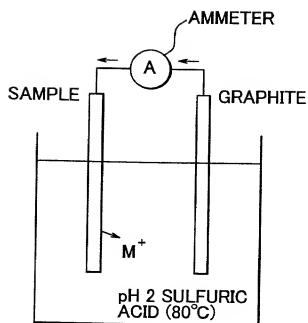
FIG. 12

SURFACE TREATMENT	CORROSION CURRENT *1 ($\mu\text{A}/\text{cm}^2$)	CONTACT RESISTANCE *2 ($\text{m}\Omega\text{cm}^2$)
E:0.1 $\mu\text{mAg}/10 \mu\text{mCu}$	6.9	10 OR LESS
F:0.1 $\mu\text{mAg}/10 \mu\text{mSn}$ (UNPROCESSED) /10 μmCu	21.9	10 OR LESS
G:0.1 $\mu\text{mAg}/10 \mu\text{mSn}$ (MELTING PROCESS) /10 μmCu	0.3	10 OR LESS

* 1: RESULT OBTAINED WITHOUT CARBON COATING LAYER OF CARBON MATERIALS

* 2: RESULT OBTAINED WITH CARBON COATING LAYER OF CARBON MATERIALS

FIG. 13



09837480.041901

FIG. 14

SEPARATOR BASE MATERIAL *	PREDETER MINED PROCESS *	METAL COATING LAYER *	CONDUCTIVE PARTICLES *	CORROSION -RESISTANT COATING LAYER *	CARBON CORROSION LAYER *
PRESENT	PRESENT NONE	METAL HAVING LOWER MELTING POINT THAN MATERIAL OF SEPARATOR BASE MATERIAL AND HAVING BEEN SUBJECTED TO MELTING PROCESS OR METAL HAVING CRYSTAL GRAIN SIZE OF 0.1 mm OR MORE	PRESENT NONE	PRESENT NONE	PRESENT NONE

* : ANY MATERIAL AS DESCRIBED IN THE SPECIFICATION
CAN BE SELECTED AS APPROPRIATE